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(54) Title: ALKYLATION PROCESS USING A CATALYST COMPRISING A SOLID ACID AND A HYDROGENATION METAL

(57) Abstract: The invention relates to a process for alkylating a hydrocarbon feed which comprises contacting the hydrocarbon feed to be alkylated with an alkylation agent in the presence of a catalyst comprising a solid acid, a hydrogenation metal, and 1.5 - 6 wt% of water, measured as the loss on ignition at 600°C. The presence of 1.5 - 6 wt% of water results in a higher activity and a higher alkylate quality compared with a comparable but drier catalyst.